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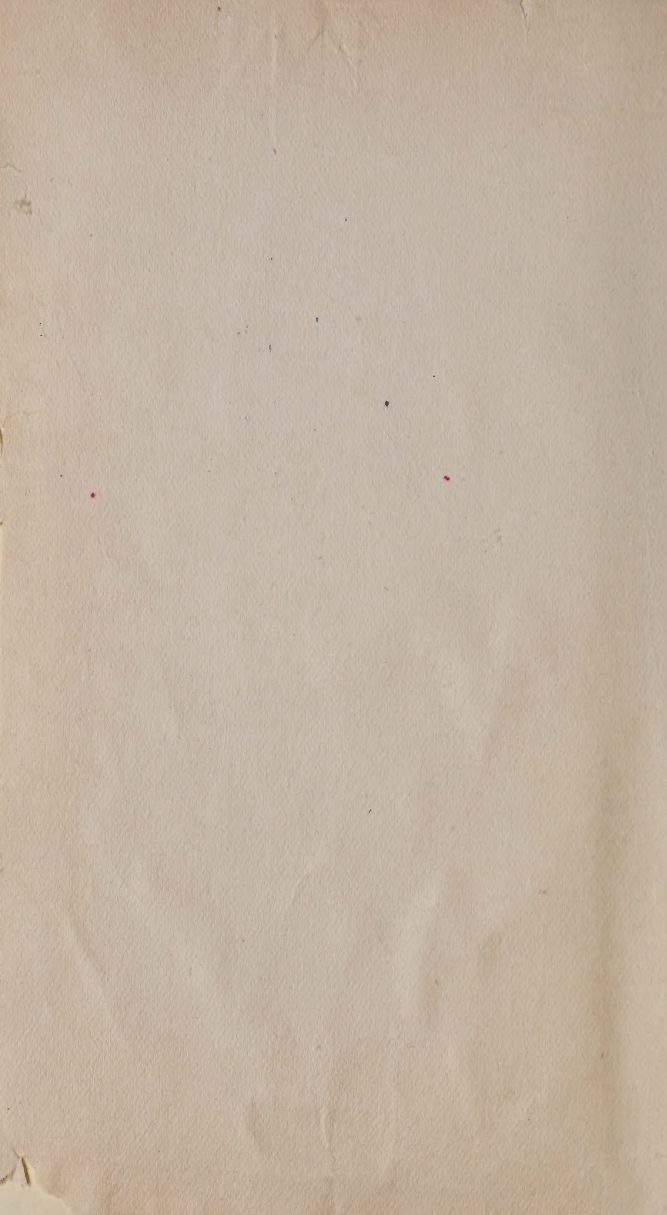
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THE RETARDED CHILD:  
HOW TO HELP HIM

A HANDBOOK FOR TEACHERS DESCRIBING  
*THE INDIVIDUAL PROGRAM METHOD*  
OF TRAINING THE DEFICIENT  
CHILD IN RURAL AND  
GRADED SCHOOLS

ARNOLD GESELL, PH.D., M.D.

*Director of Yale Psycho-Clinic, and Professor of  
Child Hygiene, Yale University*

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## INTRODUCTION

This book is a revision of a manual which was written by the author when he was School Psychologist for the State Board of Education of Connecticut. In this capacity he saw a great many defective children in rural and village schools,—children who could not be assigned to special classes or institutions, but who were for that reason all the more in need of special educational consideration. The book aims to make practical suggestions regarding the treatment of extremely retarded children in rural, village, and city schools, who can not have the benefit of training in a special class.

We can not afford to neglect the mentally deficient school child, wherever he may be found. We have not begun to do all that we might do for him.

In the first place, we ought to understand and interpret the deficient child. The first two parts of the book are intended to help the teacher to do that much. In the second place, we ought to bring about reasonable changes in his school program and in his home life, to make the most of his capacities, and to safeguard him as far as possible. The last two parts of the book give definite suggestions as to how this may be accomplished.

Although this little guidebook is particularly addressed to teachers, it should also prove helpful to parents. Whether at home or at school, the problem of the deficient child is primarily an educational one.

The present book deals chiefly with the problem of mental subnormality, but many of the principles and procedures suggested may be applied to other kinds of handicap. The individual program method of approach may be used with any child who cannot benefit from ordinary instruction, and who for his own or the social welfare needs special educational attention.

## THE PROBLEM

The problem of mental deficiency is one which we always have with us—in times of peace, in time of war, in school, and out of school. When America mobilized for the great war, the significance of the problem was brought home to us in rather striking terms. It was at once realized that mobilization meant more than powder, shells, guns, blankets; it meant a requisition and classification of brains. Every effort was made to find the right brains for officer material and technical service. Great pains were taken to exclude from the enterprise of war every man who was nervously unstable or mentally defective. It was an employment problem on a colossal scale, and our government used every available device for finding the fit and eliminating the unfit.

One of these devices was the psychological measurement of intelligence. Prior to January 1, 1919, a total of 1,726,000 men were mentally examined and rated in thirty-five army training camps. The rating was made by means of group tests and individual tests. The Alpha group test was used for men who could read and write English. The Beta test, conducted by the aid of pantomime and demonstrations, was used for all

foreigners and illiterates. Neither of these tests depended upon academic schooling. Some of the best scores were made by men who had not completed the eighth grade.

Between April 27 and November 30, 1919, 7,749 (0.5 percent) were reported for discharge by psychological examiners because of mental inferiority; 9,871 (0.6 percent) more were recommended for assignment to labor battalions because of low-grade intelligence; 9,432 (0.6 percent) were recommended for assignment to development battalions, where they might be given preliminary training and be observed to discover, if possible, ways of using them in the army. During this same period of six months, 45,653 (3 percent) were reported with mental age ratings of less than ten years. A large proportion of these men were of doubtful military value to the government they were drafted to serve.

As in the army, so in the public school, we have all grades of intelligence ranging from A plus to E minus, from mental superiority to mental inferiority and deficiency. There is this difference, however. While the army attempted to exclude all the mentally incompetent, the public school must retain them. Whether we like it or not, the public school system must serve as a "development battalion" for the semi-competent and definitely defective children who give

but poor promise of ever becoming independent citizens. Only when the deficient child is an actual menace or an intolerable burden and positively interferes with the welfare of his fellow pupils, is the public school justified in excluding him. But such cases are rare.

For a long time to come, then, there will be feeble-minded children in the rural schools, in the regular classes of village schools and in many of the regular classes of our city schools. There is no reason for believing or even hoping that all these extremely backward children will be conveniently excluded from the schools. There is no reason for thinking that they will all be assigned to special state institutions. In the great majority of cases mentally deficient children are destined to be reared in the communities where their normal brothers and sisters are attending public school.

All students of the subject agree that mental deficiency is one of the greatest of our social problems. They also agree that the problem is so complex and many sided that there is no one simple remedy for it. The doctors alone cannot solve this problem; the psychologists alone cannot solve it; state institutions and special class teachers cannot meet the whole situation. Many minds and many hands must combine in lending assistance to the deficient school child. The regular teacher, whether in a remote rural district, a



village, or a city school, has her part to play in the management of this problem of mental deficiency.

Let us admit that a special class, small in numbers, with a special teacher, and a special program and equipment all adapted to laggard minds, is an ideal arrangement for subnormal children. Let us also admit, and just as freely, that we cannot expect too much of a regular teacher. Her responsibilities lie chiefly with the normal children, and she is even open to criticism if she gives a disproportionate amount of attention to the deficient child. What we are pleading for is that this child deserves at least a little more than the average share of attention, and that this attention should be wisely directed. Our aim, in this booklet of explanations and suggestions, is to help the regular teacher to meet her responsibility in a situation which she is bound to face.

And what is the best way to help her? We hope it is by making her natural interest an intelligent one, by indicating what can and what cannot be done, so that she will not do herself an injustice with standards either too high or too low, as the case may be. We know only too well the aggravations and difficulties which often lie in her way, but we are also sure that it is a real, human problem, and that there are rewards in meeting it.

I.

THE NATURE AND SIGNS OF  
MENTAL DEFICIENCY



## I. THE NATURE AND SIGNS OF MENTAL DEFICIENCY

### *What Is Mental Deficiency?*

This, naturally, is the first question. Mental deficiency is something more than ordinary backwardness in studies, and it is something different. Ordinary backwardness is comparatively not very serious. A merely backward pupil will not graduate at the average age, but there is no reason to believe that he will not succeed in life. Ordinary backwardness may even be curable. It may be due to irregular attendance, to poor nutrition, to adenoids, to haphazard schooling, poor teaching, defective vision, lack of familiarity with our language, and a long list of other causes which retard, but do not altogether destroy, normal development.

Now, a mentally deficient child does not even have the *possibilities* of normal development. His retardation is permanent, and it is incurable. He may have poor eyesight and many other defects, but they are not the cause of his deficiency. In perhaps a majority of cases his backwardness is inborn; it is an hereditary or inherent handicap. In three or four cases out of ten it has been an injury from disease or a similar cause which so damaged his immature brain

that he can not enjoy normal mental development. Like a plant that has been stunted, he fails to reach a full mental stature. He, therefore, shows a certain lack of mental vigor, and always a kind of immaturity. Unfortunately, we cannot in any way remove such a fundamental weakness and incompleteness. It is because the brain itself is incompletely developed that we cannot make him normal. We must admit, then, that mental deficiency is an extreme, constitutional form of backwardness, which dates from birth or early infancy, and which is so serious that it will prevent the child from taking his place either in school, or in the world, on a full par with his normal fellows.

#### *What Are the Causes of Mental Deficiency?*

As already suggested, they are frequently hereditary. The mental deficiency then traces back to a defect in one or two of the parental germ cells from which the individual was developed. One of the chief causes of feeble-mindedness is feeble-mindedness. If both parents are feeble-minded, the children are bound to be so; if only one parent is feeble-minded, some of the children or grandchildren are likely to be so. Sometimes, even in hereditary feeble-mindedness, there is no defect apparent in the father or mother. There is, however, a mental or nervous defect of some kind somewhere in the family



strain, which accounts for the condition. How important alcohol and syphilis are in the production of inherited feeble-mindedness is not fully known.

In many instances, however, the causes are not inborn, but acquired. Mental deficiency may be due to some damage to the child's organism, either in the prenatal period, during birth, or in infancy. A direct injury to the brain by prolonged pressure or by a fall may be the cause, though these cases are not numerous. In other instances the poison of severe infectious diseases may irreparably damage the growing brain cells, causing mental deficiency. Or the brain and its membranes (the meninges) may be affected by a disease like cerebro-spinal meningitis. Finally, if a child has frequent epileptic convulsions in his early years, the after-effect may be mental deficiency.

When feeble-mindedness is due to ancestral factors, it is transmissible. It is a pity and a menace that so many feeble-minded have the opportunity to marry and thus pass on the condition.

### *Does the Mentally Deficient Child Look Subnormal?*

Sometimes; but by no means necessarily. In countenance, facial expression, and ordinary demeanor, he often is indistinguishable from nor-

mal children. It is rather dangerous to judge too much by physical appearance. A child may look 'queer' or defective, and yet be perfectly normal. Misshapen head, small head girth, over-large or deformed ears, poorly formed nose, open mouth, coarse flabby skin, thick, stumpy fingers, 'peculiar' hands, weak hand grasp, generally stupid expression—these and other physical signs have importance only when they are combined with mental inferiority. It is much safer and more scientific for the teacher to pay attention to how a child uses his body and his hands, how he walks, climbs stairs, handles things, how he plays and works. For, after all, it is his mental characteristics, his behavior, that count.

*What Is the Chief Weakness of the Deficient Child?*

First and foremost, he is deficient in intelligence. This is his fundamental defect. By "mental deficiency" we mean "deficiency of intelligence." Intelligence is the most practical aspect of the mind. It is the capacity to profit by experience and the power to make adaptations to new situations as they arise or even before they arise. It is that mental part of us which means preparedness to meet the demands of life. And this is just what the mentally deficient child lacks. To be sure, he has *some* intelligence, but he does not have a normal amount. He is not

strong minded like his normal companions; he is so feeble of mind that he falls far behind in the race. He falls behind his grade in school. When he grows up, he keeps on falling behind. He will stumble into difficulties; he may fail altogether in the struggle for existence, as he has failed in a struggle for education. A man with a weak heart cannot climb a steep hill. In the feeble-minded it is the power of mental adaptation which is weak, and they cannot surmount the obstacles which the requirements of ordinary community life present. They do not have the clearness of perception, or the mental vigor to grasp and handle even the ordinary problems of human existence. They are at the mercy of events. Normal minded people are at least partial masters of their fate.

This has all been well said by Miss Mary Dendy, of Manchester, England. "To all of us birth happens and death happens. Those of us who are sane *know*, whatever we may *think*, that between birth and death we have the power, to a great extent, of guiding our own lives; we have the choice between good and evil. To these less happy brethren of ours [the feeble-minded] not only do birth and death happen, but everything that comes between; their lives are one long happening."

It is a deficiency of intelligence which makes their lives "one long happening."

*Can Intelligence be Measured?*

Every person who is at all observant of human nature makes estimates of intelligence. He classifies his friends—and his enemies—into various groups:—stupid, clever, mediocre, etc. The school teacher estimates her children in a similar manner; and roughly separates them into two or three divisions: the bright, the average, the dull. There is, however, one great source of error in estimating the intelligence of children. They are constantly growing, and it is difficult to keep definite standards in mind. A boy of twelve may be doing excellent work in the fifth grade; the teacher calls him bright. Another boy of ten may be doing only passable work in the same grade, and the teacher calls him average or dull. As a matter of fact, the ten-year-old boy may really be brighter than the older boy, if we take actual age into account. Ability to do school work is a very proper measure of intelligence, but a most important factor is the age of the child. And we cannot make an adequate estimate of intelligence until we take age into full consideration.

Can we do this with anything like precision? The great French psychologist, Alfred Binet, has shown us that we can. After years of patient investigation of his own children, and of normal and deficient school children in Paris, he devised a graded series of mental problems, or tests,

which he justly called a "measuring scale of intelligence." No one pretends that this scale has the accuracy of a clinical thermometer, which reads to a tenth of a degree, but it is a "scale" because it is made up of standardized units. Judiciously applied, this scale or one of its improved revisions furnishes us a rating of intelligence.

For example, it was found after numerous comparative trials on children of various ages that at different levels of mental development children respond differently to a picture. A child of three will ordinarily look at a picture, and simply enumerate all the objects in it: "man; river; boat, etc." On the average, say seven cases out of ten, a child of seven, however, will describe the picture: "The man is paddling. The boat is going down the river." Whereas at the age of twelve the average normal response is an interpretation of the picture. "They are fleeing from danger, etc." This is the principle of a graded intelligence scale. Five or six tests for each age from three to twelve or sixteen furnish the basis of measurement. What is normal or characteristic of a given age being known, we can determine roughly whether a child tests above age, below age or at age; and we can tell how much he deviates from his fellows. We express his 'score' by mental age. He is actually eight years old; that is known as his "chron-



logical age." He tests six years of age by the scale; that is his "mental age." This mental age gives us some idea of his retardation; but we do not get a true conception of his intelligence caliber until we compare mental age and chronological age. The ratio between the two is the significant thing. This ratio is the intelligence index. It is usually called the intelligence quotient (abbreviated, I.Q.) because it is derived by dividing the mental age by the chronological age. The formula is:

$$\text{I.Q.} = \frac{\text{M.A. (mental age)}}{\text{C.A. (chronological age)}}$$

If the numerator and denominator are equal, we get unity, or 100%, or an I.Q. of 100. If the numerator is 2, and the denominator 3, we get a value below 100 (I.Q. = 67). If the numerator is 3 and the denominator 2, we get an I.Q. of 150, which indicates a very superior intelligence. An I.Q. of 67 or less, however, nearly always means feeble-mindedness. If we use the carefully standardized methods of the Stanford Revision of the Binet Scale, we may safely say that in children the following ratio between mental age and chronological age usually denotes mental inferiority or deficiency: 4:6; 6:9; 8:12; 10:15.

It is desirable to insert a word of caution in regard to the application of the results of a group mental test. The score on a group test should

always be considered merely indicative. The group test is for preliminary, not for final classification. There is always danger of making some error if a group test score is uncritically converted into an I.Q. rating and a group test I.Q. is not the same as a Binet I.Q. In all cases the teacher should not rely on an unqualified psychometric score, but should remember that this score is only one item among several to be considered in making estimate of the child's actual caliber and vocational outlook.

There is a general tendency for the I.Q. of any given child to remain constant. Once a real dullard usually means always a dullard. If a child is definitely dull or deficient in infancy, he is not likely to outgrow the condition. Likewise, and this is fortunate, if a child is definitely bright or superior, he is very likely to remain so in youth and in adult years.

It follows that the intelligence which a child has when he enters school, predicts in a general way how well he will respond to ordinary instruction. To take the example already cited, if at the age of six, he is two years retarded as to mental age, his academic outlook is decidedly subnormal, for he is likely to remain retarded to the same relative degree throughout his school career. At nine the intelligence retardation of this same child is likely to amount to three years (mental age, 6; chronological age, 9; I.Q., 67).

At twelve his retardation will probably amount to four years (mental age, 8; chronological age, 12; I.Q., 67). At fifteen it will amount to five years (mental age, 10; chronological age, 15; I.Q., 67). Of course, there are important exceptions to this rule; and we must not regard the I.Q. as an infallible measure of ultimate capacity. But, in general, it is so significant that we are justified in saying that two years of retardation of intelligence at the age of six is as serious as five years of retardation of intelligence at the age of fifteen. One condition is equivalent to the other and usually signifies mental deficiency.

Nevertheless, we must keep reminding ourselves of the exceptions. Only the other day we examined an Italian boy, who wrote a passable seventh-grade letter and could 'do' eighth-grade arithmetic. On the Stanford Binet scale, however, he could score an I.Q. of only 65. We did not diagnose him to be mentally deficient. His personality make-up is favorable; the quality of his modest intelligence is good. He has probably reached the limits of his academic attainment, but he will doubtless be able to shift for himself when he grows up, because of his normal personality traits. Never forget that the personality factor is important in estimating the outlook of a problem pupil.

*What are the Different Degrees of Intelligence?*

For convenience we may say that there are three grades or degrees of intelligence to be found among school children: average, superior, inferior; normal, supernormal and subnormal. By normal intelligence we mean that ordinary amount of intelligence which most children have and which insures their ability to meet the ordinary demands of life. Such children are neither much retarded nor advanced in their schooling. They are neither far below or above par. In terms of I.Q. (intelligence quotient) they rank, according to the Stanford-Binet ratings from 90 to 110. Children with an I.Q. above 110 may be regarded as more or less superior by Professor Terman's classification. Children rating from 90 to 80 are usually dull. From 70 to 80 is the region of "borderline deficiency." Sometimes these children are classifiable as dullards, sometimes as mentally deficient (feebleminded).

Mental deficiency or subnormal intelligence differs in grades of severity. Three main grades are recognized: low, medium and high grade; idiot, imbecile and moron. The I.Q. for these classes would range between 50 and 70 for moronity; between 20 or 25 and 50 for imbecility; and below 20 or 25 for idiocy.

These I.Q. zones are rather arbitrary and approximate. They do not have the accuracy of parallels of latitude.

The British Parliament has defined the major grades of mental deficiency. In many ways these statutory definitions are more significant than the psycho-metric.

The idiot stands at the bottom of the scale. He is often utterly helpless, and he very rarely enters a public school, because his mental age is less than three years. The Mental Deficiency Law of England defines idiots as "persons so deeply defective in mind from birth, or from an early age, as to be unable to guard themselves against common physical dangers."

The imbecile stands somewhat higher in the intelligence scale. His mental level is between three and seven years. Imbecile children sometimes find their way into public schools. The Mental Deficiency Law defines imbeciles as "persons in whose case there exists from birth or from an early age mental defectiveness not amounting to idiocy, yet so pronounced that they are incapable of managing themselves or their affairs, or, in the case of children, of being taught to do so."

The most important and most numerous group is the moron. He stands near the borderline of normality. He often looks normal and so we allow him to drift into situations which he cannot meet. It is the moron who makes so many problems for the schools and for society. The moron mentality ranges in terms of intelli-



gence age, from seven to eleven years. The English legal definition of the moron is as follows: "Persons in whose case there exists from birth or from an early age mental defectiveness not amounting to imbecility, yet so pronounced that they require care, supervision, and control for their own protection, or for the protection of others, or, in the case of children, that they, by reason of such defectiveness, appear to be permanently incapable of receiving proper benefit from the instruction in ordinary schools."

#### *How Many Children Are Mentally Deficient?*

Our answer depends, of course, upon the standards which we use and how accurately we apply them. Terman has found that among 1000 unselected school children, 1% have an I.Q. of 70 or less. By this standard it is safe to say that for a large number of cases, 1% of the elementary school enrollment is definitely deficient. Our mental surveys of Connecticut school children indicate that this approximates the actual percentage.

So far as the teacher is concerned this statistical question has no practical importance. The figures hold only for a large number of cases, and the distribution of cases in any school building or school district will be uneven. For example one rural school may not have a single mentally deficient pupil, another may have two

or three. There are similar variations in graded school systems. One building with 500 pupils may have only four deficient pupils, another of the same size or even smaller may have eight. The third and fourth grades are likely to have more than the sixth or seventh, except when the deficient children are promoted by courtesy.

*What is the Difference between a Dullard  
and a Deficient Child?*

It may not be altogether scientific to make a rigid distinction between the two. It has been maintained that grades of intelligence fade into each other like day, dusk, dark and dawn; and that it is arbitrary to draw sharp lines between the grades. For practical reasons, however, we insist that a clear cut distinction should be made between the dullard and the deficient child. And the distinction should be made in favor of the dullard. A dullard is not a very high-grade moron; he is not a super-moron. He is to be regarded as a definitely normal individual, whose faculties are simply below the average in quantity but closely akin to the average in quality. He is organized along normal lines. He may be slow witted; but he is not weak witted. He has considerable mental stamina and stability. When we psychologically describe him as a low-grade normal, we do it in no derogatory sense. He may be backward in school; he may be

rather obtuse in abstract, academic subjects; but in his natural sphere he succeeds. He makes his way in the world; because he has enough mother wit to do so.) This is more than we can say of the moron; for as Tregold has pointed out, even the highest grade moron is lacking in "that essential to independent existence, common sense."

A deficient child is so defectively organized that he does not promise even the modest success in life which the dullard attains. The typical dullard profits much more from experience, and responds much more to proper education.

There will be borderline cases where it will be difficult for the teacher to make a distinction between deficiency and dullness. It is precisely in these cases that she should be careful not to regard as mentally deficient, any child who is likely to become an independent wage earner and to be able to shift for himself in the struggle for existence.

### *What is the Chief Characteristic of the Mentally Deficient Adult?*

The best, brief answer to this question is summed up in Dr. Tregold's definition of feeble-mindedness. In his words, feeble-mindedness is "a state of restricted potentiality for, or arrest of, cerebral development, in consequence of

which the person affected is incapable at maturity of so adapting himself to his environment or to the requirements of the community as to maintain existence independently of external support.”

This definition is well worth mastering. We recommend that the teacher memorize it, analyze it and interpret it. Notice that the test or criterion of mental deficiency is a *social* one. A feeble-minded person cannot become an efficient, responsible member of society. He cannot become an independent wage earner or a self-controlling citizen. A feeble-minded man ought never to be allowed to try to found a home and rear a family; a feeble-minded woman cannot properly manage a home and for this reason alone, if for no other, she ought not to become a mother of children. She does not possess the mental ability properly to bring up children.

The feeble-minded are, therefore, at once mentally deficient and socially deficient. They cannot function as normal members of society because of subnormal mental endowment. It is not perversity, viciousness, or laziness which makes them fail. It is a degree or a kind of mental incompetence. It is defective intelligence plus defective or insufficient personality.

*What are the Social Consequences of  
Feeble-mindedness?*

When feeble-mindedness is uncontrolled by society all sorts of vocational, economic, and moral problems arise. Many of our social problems are caused by the vocational inefficiency of the feeble-minded. Vocational inefficiency shows itself in so-called shiftlessness, unemployment, irregular employment, begging, vagrancy, pauperism. This does not, of course, mean to say that every pauper is feeble-minded. That would be a libel. But it does mean that feeble-mindedness is an important cause of pauperism and indigence. A large portion of those who drift into almshouses, particularly those who are not of advanced age, have failed in the struggle for economic existence because of the feebleness of their wits. They did not have the mental tenacity and good judgment to succeed from day to day, month to month, and year to year. For the same reason the feeble-minded earn sub-normal wages at piece work; or are "handed around" from job to job without holding any position for a great length of time. Some become vagrants, ne'er-do-wells; many are wastrels, to use an English term. "Good-for-nothing" we often call them. As a matter of fact they are good-for-something; but only if we put them into suitable surroundings where their weak intelligence will not be overtaxed.

The foregoing failures we call economic failures. If the same individual fails along legal lines we call it crime, delinquency or vice. Economic failure and moral failure are psychologically akin. They both may be an expression of mental weakness. It takes a reasonable amount of intelligence to recognize right and wrong, to keep definitely in mind the consequences of wrong, and to shape conduct in accordance with the advantages of right. For this reason it has even been suggested that every feeble-minded person is a potential criminal. As a matter of fact a remarkably large number of feeble-minded persons manage to keep out of jail; but a proportion do not, and serve long sentences in reformatories and prisons. About one out of five of the inmates of penitentiaries is feeble-minded. Likewise many of the boys and girls who are committed to reform schools, particularly among those cases who cannot be permanently reformed, are definitely deficient. When the impossibility of reform is due to mental deficiency, we call the individual a *defective delinquent*. A fraction of the incorrigible or disciplinary cases among school children are defective delinquents.

Lack of intelligence may be at the basis of other forms of subnormal control, such as alcoholism and sexual immorality. Not all, but,



again, a considerable percentage of inebriates and of prostitutes are feeble-minded.

Is it any wonder that we have so many social problems directly due to mental deficiency? We can only rejoice in the good fortune of those instances where a happy combination of favorable circumstances allows the feeble-minded person to live a partially useful or at least a harmless life. We wish it were possible always to provide the external support which their mental frailty needs. Perhaps some day we shall be able to do so, if we begin near the bottom and cope with the problem as we find it in our public schools.

*How Does Mental Deficiency Show Itself  
in the School Child?*

Naturally, the failures of the neglected feeble-minded adult are foreshadowed in the school life of his childhood. The failures in school may not be so glaring because we do not expect too much of the immature and because we naturally protect children. Sometimes it even happens that the optimistic school teacher does not recognize the existence of feeble-mindedness in a pupil, particularly if the pupil is a docile and agreeable child. But if the teacher has a proper appreciation of the fundamental importance of intelligence, she is likely to see

the signs of defect in the school behavior of a deficient child.

What are these signs? Let us enumerate them, cautioning the teacher to use good judgment in interpreting them.

In the first place a deficient child does not play in a normal manner. He never is a leader on the playground; and often he is not even a follower. He prefers to sit by idly, content to watch others play; and this, not because he is physically weak, but because he is mentally inert. He does not have ordinary, healthy play interests; he is listless; and if he attempts to play a game beyond his mental and moral powers, he gets into difficulties; he is not likely to be a popular playmate. There are some children of high-grade mental defect who manage to play pretty successfully; but even they are usually fond of the simplest games only, and they tend to play with companions below their own age.

In work as well as in play the signs of deficiency show themselves. If the child is of very low grade intelligence, say that of an imbecile, he will not be able to acquire the 3 R's at all. His writing will then be mostly scribbles; he will probably be unable to draw a copy of a diamond; he might after much training, learn to recognize a few words, and do a few simple sums. But when we recall that it is possible to

teach almost as much to an "educated horse," it does not follow that he can really read, or that he has any comprehension of numbers, beyond a few, concrete situations.

*What Can a Moron Do in Ordinary  
School Work?*

While an imbecile is almost entirely incompetent in the ordinary school room, a high-grade moron may accomplish a good deal with the 3 R's. But it will be hard for him to learn. By the time he gets to his teens he is usually three years or more behind his grade; and what he does learn he often fails to understand. In rare cases he may have learned to perform long division, but usually his comprehension of arithmetic is far below that. He always has great difficulty with fractions and with problems requiring reasoning. There is a concrete kind of arithmetic, however, in which he feels more at home; and this kind only has any value for him.

A high grade moron may learn to write a simple letter. His powers of composition, however, are usually below even that; and he is deficient in matters of punctuation, sentence structure and, of course, in grammar. His penmanship is likely to be far superior to his language power. This is because penmanship is merely a motor habit, while written language makes demands upon a higher kind of intelli-

gence. A moron may learn to read, but he acquires the art with difficulty. His reading is likely to be monotonous, and rather slow. While a normal child usually learns to read with some expression and understanding, the feebleminded child tends merely to call off the separate words, and is deficient in reproducing the thought of a selection. A moderate ability to read in a child of twelve years or over must not, however, be taken as a proof that the child is not mentally deficient. If he is seriously retarded in all his school work and shows poor judgment and general lack of common sense, he may still be feebleminded.

We must never forget that academic attainments may be largely mechanical, and simply due to years of drill, drill, drill. For example, a deficient girl about eleven years old, a third-grade pupil, could glibly recite the "five table." The patient teacher had drilled so hard on that table, that the child reproduced it perfectly. But it must have been a phonographic kind of reproduction, because when the child was asked, "Which is more: five or two?"—she could not answer!

In history, a mentally deficient pupil ordinarily makes very little progress. He may learn a few simple facts, in a somewhat parrot fashion, about George Washington, Columbus, and Abraham Lincoln; but he often gets his historical

characters sadly mixed. He may say that Columbus was the first president, and if you ask him who lived first, Columbus, Lincoln, or Washington, you cannot be at all certain that you will get a correct answer. Though a mentally deficient child may learn simple stories about historical men and events, he has a very meager historical sense. The teaching of history to the feeble-minded is mainly a waste of time, and often an absurd waste.

The same is true of geography. A few barren geographical facts, the feeble-minded pupil can memorize. He may even learn to recite after a fashion in a map study lesson. He may point out South America, but ask him which is larger, Connecticut, New Haven, or America, and you may get a wrong reply. He does not grasp relations which are abstract. He often fails to grasp concrete relations, when these are beyond the range of his own immediate experience.

*What Does the Deficient School Child Need  
Most of All?*

Most of all, he needs to be understood. ) When teachers, parents, and elder schoolmates begin to understand him, the chances are that he will be made more happy and more useful. At least, the teacher who is with him every day can make a determined effort to understand him. She can

observe his behavior, note his limitations, and get some conception of his mentality. Of what value is all our psychology if we cannot use it in order to interpret a feeble-minded child? Let the teacher once really appreciate the nature of such a child and she will soon find some devices by which he can best be treated. The teacher can do much to make the lot of the deficient child a more comfortable one. She can treat him with such consideration that the whole schoolroom will respond to the suggestion. If the child is a butt of teasing and other forms of mental cruelty, the teacher is the one to change all this for the better. We must all begin to look upon the feeble-minded more as we look upon the crippled and physically infirm. A crippled child is the object of peculiar concern and consideration. We do not expect too much of the cripple. Least of all do we regard his weakness as in any way a disgrace. Yet, when it comes to the feeble-minded we often wrongly attach a stigma to their condition. The rural teacher, the village teacher, and in city schools, the principals, can do a great deal toward removing this stigma. No teacher or principal should tolerate in the vicinity of the school grounds the calling of names and the tormenting which are still too commonly the lot of the deficient child. By indirect suggestions, and sometimes by a little plain talking, the teacher can make the attitude of the normal chil-



dren one of wholesome sympathy and appreciation for the subnormal member of the group. If these normal children need a little sermon on the subject, why not recall to them the kind instincts which they ordinarily display toward the crippled, the paralytic and the blind; and make them realize that the feebleminded are in need of the same kindness?

The solution of the problem of feeblemindedness depends to a large extent upon general mutual understanding. It might almost be said that if everybody concerned, really understood the feebleminded members of their community, it would be possible for a great many of these members to lead a fairly satisfactory life outside of an institution.

The place to begin this policy of mutual understanding is right in the schoolroom. Begin it, by not expecting anything of the feebleminded child which he is not equal to. Make allowances for him. If necessary, make a special program for him. If necessary, give him a special table and a little work bench in the corner of the room; and instead of fearing the consequences which such special attention will have upon the 'discipline' of the room and upon the regular pupils, enlist the interest and coöperation of these pupils in solving the problem. The problem is this: How can we keep a feebleminded child in an ordinary school room,

and yet serve his best interests? He is bound to get more than his share of attention in any case. Make the attention intelligent; and if the routine is somewhat disturbed, the educational benefit for the whole group may be all the greater.

In the lower grade cases, where the child is conspicuously below the mental level of his schoolmates, the problem will be greatly simplified by delegating much of the special work to bright monitor pupils. These pupils will take a pride in helping the teacher and the child. Make it a family problem; encourage coöperation and the subnormal pupil, instead of being a drag upon the room, may furnish a real stimulus to the social education of the whole group. Let us so change the situation that the deficient child will become an educational asset. This will be for his own benefit and for ours.

*Who Should Make the Diagnosis of  
Feeble-mindedness?*

The teacher should never make an official diagnosis. That is the business of a qualified examiner. Should the teacher, then, regard every child as normal until she is notified to the contrary? That would be too much to expect. Every intelligent teacher is bound to make some kind of judgment in regard to her pupils, and sometimes this judgment must amount to a conviction that a child is definitely feeble-minded.

When a case is doubtful, it is her duty to suspend her judgment; but when she has ample evidence of real deficiency, such as is described in this booklet, it is her duty to shape her policy with respect to the child in accordance with that evidence. In consulting with intelligent parents of the child, she may then go so far as to say something like this: "In my opinion the child is seriously backward, he will never accomplish what the average pupil accomplishes, and he should have special attention during his school life and after he leaves school." This is going far enough; she should not undertake to make a formal diagnosis, and she is not called upon to use the term 'feble-mindedness.' The most convenient term to use, if any be necessary, is '*deficient*.' This is sufficiently accurate, but it is not a harsh designation, because teachers often use a similar expression with normal children who are reported "deficient in arithmetic," "deficient in reading," etc. We recommend, then, that instead of using such unreserved terms as 'feble-minded,' 'abnormal,' 'degenerate' or 'imbecile,' teachers will simply say 'a deficient child' or 'a seriously backward child' "or a retarded child."

And, it is scarcely necessary to add, we should not talk about a child's defects and failures in his presence.



II.

ILLUSTRATIVE CASE STUDIES OF  
DEFICIENT SCHOOL CHILDREN





## II. ILLUSTRATIVE CASE-STUDIES OF DEFICIENT SCHOOL CHILDREN

### *Types of Deficient School Children*

For the convenience of the reader we insert here a tabular psychological classification of children, which furnishes a bird's-eye summary of some of the main facts in regard to the different types of educationally exceptional school children.

As a simple standard of reference for the aid of the teacher, we also present a few case studies of actual school children. Three girls, Harriet, Sarah, Helen, representing respectively low-grade deficiency, dullness, and mental superiority are briefly described, and specimens of their writing and drawing are shown. Following this, is a comparative description of three brothers, who are in the same public school, who are of exactly the same Binet age, who have substantially the same school attainments, but who represent, because of their differences in chronological age, three descending degrees of mental deficiency. These boys, of course, belong to the hereditary type of mental deficiency.

#### *Harriet, I.Q. 43*

Here is a girl whom we first examined four years ago. She was then seven years old, but

## A SCHEMATIC CLASSIFICATION OF INDIVIDUAL DIFFERENCES

This is simply a table of reference. It should be clearly understood that it is impossible to draw hard and fast lines between different groups of children. No classification should ever be made on the basis of an intelligence quotient (I. Q.) alone; still less on the basis of a group test score. The I. Q. always needs careful supplementary interpretation. The whole make-up of the child including personality characteristics, should be considered. These characteristics may count as much as I. Q. points.

Standard Groups arranged on the basis of general intelligence	Mental Age	I. Q.	Personality Make-up	Educational Possibilities	Vocational Possibilities	ATYPICAL GROUPS, Deviates from the standard and variable as to degree and balance of intelligence
<i>Superior</i> in general capacity and mental adaptability	Above par	Usually above 110	Personalities depend very much on such personality and vocational factors as I. Q. Educational and vocational control, steadiness, cooperativeness, etc.	College, University and technical courses	Professional and advanced positions in scientific, technical, executive, etc. fields.	<i>Sensory-motor Defective</i> (Blind, Deaf, Mute, Crippled) <i>Speech Defective</i> (Stuttering, malarticulation) <i>Defective Delinquent</i> (Of pronounced delinquent tendency, but primarily mentally defective)
<i>Normal</i> in general capacity and mental adaptability	At or near par	From 110 to about 80	Personalities vary greatly for all grades of children.	Elementary school followed by secondary or continuation courses	Vocational independence in numerous fields.	<i>Reformable Delinquent</i> (Delinquent, but of sufficient intelligence and stability to be reformable)
<i>Subnormal</i> in general capacity and mental adaptability. <i>Moron</i>	11 to 7	From about 70 to 50	Personalities vary quite as important as I. Q. Educational and vocational control, steadiness, cooperativeness, etc.	Rudiments of the 3R's. Training in simple trades and occupations.	Vocationally semi-dependent. May earn a living, but need guidance and oversight.	<i>Epileptic</i> (General seizures, Recurrent spells of unconsciousness, <i>petit mal</i> .)
<i>Imbecile</i>	7 to 3	From about 50 to 20	Personalities vary quite as important as I. Q. Educational and vocational control, steadiness, cooperativeness, etc.	Training for specific tasks as helpers in routine work. Simple habits of everyday life.	Vocationally dependent. Can work in farm or industrial colonies. Need constant supervision.	<i>Psychopathic</i> (Hysteria, neurasthenia. Extremely seclusive. Abnormally unstable. Abnormal shallowness of emotion.)
<i>Idiot</i>	3 to 0	From about 20 to 0	Personalities vary quite as important as I. Q. Educational and vocational control, steadiness, cooperativeness, etc.	A few personal habits.	Vocationally incompetent.	<i>Backward</i> (Retarded on account of physical defects, educational handicaps, or acquired inhibitions)

although she had been in the kindergarten for two years, she was not ready for promotion into the first grade. And the sad fact of the matter is, she never will be ready. She is now eleven years old, but cannot be taught the first rudiments of reading and writing and numbers. At the age of seven she could not count four pennies; she can do so now in a rather mechanical manner, but she has no clear concept of even the number four. As for writing, she is still in the scribble stage. In 1914 she made the scrawl shown in Figure 1 to represent a dolly. In 1918 she is unable to draw a steady straight line, and she cannot make a cross mark even when shown a model.

All of this tends to prove that her mental development has been practically at a standstill; and that six years of public school life have had little effect upon her intelligence. This is very neatly corroborated by the records of our two mental examinations. In 1914 her mental age was exactly 3 years; in 1918 it was exactly four years by the same tests. It has taken her four years to make one year of normal intelligence progress as measured by these tests. Evidently she has not "outgrown" her deficiency as her mother hoped she would. Nor has she deteriorated. She has just about held her own; for her I.Q. (intelligence quotient) in 1914 was 43 and now it is 37, a very close correspondence.

What can Harriet do which she could not do four years ago? She can give an acceptable definition of a chair and a table; she can tell you what one must do when cold or hungry; she can match a few simple geometrical forms; she can tell us whether she is a girl or a boy. But she cannot yet give us the names of colors, or of familiar coins, nor distinguish between right and left. Why does she seem so much more deficient than she did when she was in the kindergarten? Simply because she is older. While she was a mere child, many allowances were made for her; now more is expected; but relatively (as shown by the I.Q.) she was about as defective in 1914 as in 1918.

This case is, therefore, instructive because it shows how important is the ratio between mental age and chronological age. We can never make a satisfactory estimate of a child's intelligence caliber unless both standards are taken into account. Harriet's case also illustrates the fact that even children of imbecile grade are able to go to school, and that they can be maintained there if we make proper provision for them. Many, however, would consider her an institutional case because she is even at best a very difficult child to manage, and does not get proper chaperonage to and from school. Most deficient school children are morons, similar to the type described further on; and a great deal can be

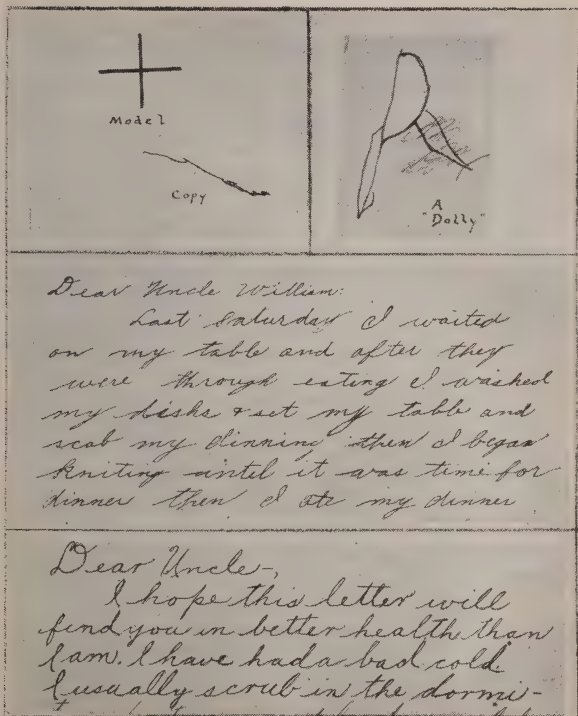


FIGURE 1.—THREE GRADES OF MENTALITY

The drawings are by Harriet, age 11, I.Q. 43, Mentally Deficient. (Kindergarten)

The letter to Uncle William is by Sarah, age 14, I.Q. 75, Dull. (Grade VI)

The other letter is by Helen, age 12, I.Q. 137, Superior. (Grade VIII)

done for them in the public school, even outside of a special class.

*Sarah, I.Q. 75*

Sarah is physically a well developed girl; she makes a fairly pleasing impression, though she is somewhat slow and awkward in her movements, and has a reputation of being rather slovenly. She is fourteen years old and it is evident from her school work that she is not very bright. She is in the sixth grade and is, therefore, retarded about two years. The intelligence tests show even more retardation, for she earns a score of little over ten years. She is slow in her responses and never brilliant; however she makes no absurd replies, and shows a mild sense of humor, which speaks well for her. We know nothing in her history which proves serious lack of good judgment. Though her school work is only passable, it is evidently more than the product of mechanical drill. (See, for example, her letter to her Uncle William, Fig. 1.) The total impression is that Sarah is simply a slow, dull girl. In spite of her marked retardation, we would not consider her deficient. She has definite limitations, and should not be considered a candidate for higher, academic education. It is her modest ambition to become a seamstress; and in all probability she will succeed, independent of external support. We anticipate that she will



be able to shift for herself, and show ordinary prudence and good judgment. Therefore, we classify this girl on the normal side of the borderline—dull, but not deficient.

*Helen, I.Q. 137*

Helen makes no doubtful or borderline impression. Intelligence shines in her features; as it shines in her school record and in her responses to the psychological test. She mentally outranks all her schoolmates many of whom are a few years older. She has an intelligence quotient almost thrice that of Harriet, and almost twice that of Sarah. Helen is only twelve years old; but she is in the eighth grade, and her mental age is about 16. Even so, she may be somewhat retarded, pedagogically; for she has been mentally ready for high-school work for a year or more. Her language reflects her mental maturity. She has a vocabulary of over 10,000 words, almost that of an average adult; and this is particularly interesting because she has had a very unfavorable home life. Her home life has been so adverse that if she were dull (like Sarah) we might have been tempted to explain her dullness by these home conditions. This would have been poor logic, for intelligence caliber is primarily a matter of inheritance.

Helen freely uses such words as "depose" and "compassion." Asked to state the differ-

ence between character and reputation, she instantaneously replied with Napoleonic precision and succinctness. Once hearing seven digits pronounced at the rate of one per second, she can repeat them backwards. In five seconds she solved an arithmetic problem which fourteen year children often take a minute to work out. Note also the way in which she writes a letter (Fig. 1).

So far as intellect is concerned, this girl will surely be able to meet the ordinary demands of life, without external support. She is not only normal; she is superior, and as a matter of justice and conservation she deserves superior educational advantages.

### *Three Brothers, Mental Age 7*

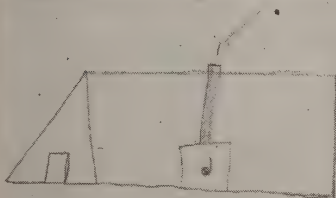
We discuss these three children together, because mentally there happens to be a remarkable similarity between them. This similarity emphasizes certain important differences. Almost to a detail, they pass and fail the same tests in the measuring scale of intelligence; and their responses are much alike in quality. This is suggested by the samples of school work shown in Figures 2, 3, and 4. It is also shown in the estimates which the teachers made of their school ability. In reading, writing, arithmetic, and spelling they were rated at second-grade, or in some cases third-grade ability.

I am 10 years old.

12

I live in the state of connectt

I went peddling with  
papers on Saturday.

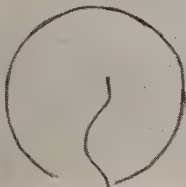


$$2+2=4$$

$$5-2=3$$

$$25-4=21$$

$$\frac{1}{2} + \frac{3}{4} = 37$$



$$\begin{array}{r} 78314 \\ -69372 \\ \hline 08942 \end{array}$$

$$9 \overline{)6472}$$

FIGURE 2.—Samples of Work Done by the Younger Brother, Andrew: Mental Age 7, Chronological Age 10, I.Q. 71.

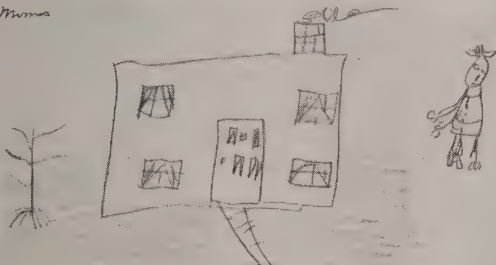
In explanation of the samples of their school work and mental output, note first that each boy was able to write without assistance a sentence stating his approximate age. Below this sentence is reproduced a "letter" telling "What I did on last Saturday." The drawings portray a house, a man, and a tree. The circle represents the results of the Ball and Field Test, an interesting intelligence test, which is embodied in the Stanford Revision of the Binet measuring scale. Briefly, we said to each child: "Let us suppose that your ball has been lost in this round field. You have no idea what part of the field it is in; but you know it is there somewhere. Now take this pencil and begin at the gate, and mark out a path to show me how you would hunt for the ball, so as to be sure not to miss it." This test demands a little practical judgment on the part of the child. We consider that a child fails, if he cannot comprehend the instructions. Such was the case with Harriet. The three brothers grasped the instructions, but failed to show any definite plan in carrying out the search for the ball. At the mental level of eight years we expect evidence of at least a little foresight, an inferior plan of search. Sarah, the dull girl, made a path around the margin of the field, an inferior plan; while a normal or superior girl of twelve like Helen, meets the logical requirements of the problem, with a superior plan of

I am twelve year old.

New Haven has very  
cold. I saw in the school  
yard. At a good time  
in the school yard.

your friend

Mama

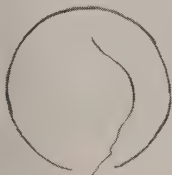


$$2 + 2 = 4$$

$$5 - 2 = 3$$

$$25 - 4 = 21$$

$$\frac{1}{2} + \frac{3}{4} = 10$$



$$\begin{array}{r} 78314 \\ -69372 \\ \hline 19042 \end{array}$$

$$\begin{array}{r} 639 \\ 9 \overline{)6472} \end{array}$$

FIGURE 3.—Samples of Work Done by the Middle Brother, Elmer: Mental Age 7, Chronological Age 12, I.Q. 64.

search, which covers the whole field with a spiral or fan-shaped path.

Let us now inquire whether the three brothers have all become permanently arrested just below the level represented by fourth-grade school work.

Take first the case of Andrew. He is ten years old. He is doing passable third-grade work in all his subjects. This is not a serious retardation; but by the intelligence tests, he is at the seven-year level, and his intelligence quotient is only 71. This is not very reassuring; particularly under all the circumstances. He does not show normal grasp of his school work, and his teacher suspects that he is going to have great difficulty in the fourth grade. If he becomes stranded there, we shall be forced to conclude that he is probably deficient; though at present he is both absolutely and relatively the brightest of the three boys. We believe that he is near the limits of his mental development, that the next five years will accentuate his deficiency, and that he will not rise to the eleven- or twelve-year mental level. We think, however, that at his present age he should be given every advantage in his school work, but vocational and hand work are already indicated in his case.

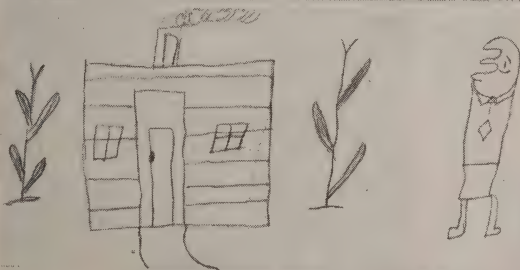
Elmer and Amos are decidedly inferior to Andrew, and unquestionably deficient. By mental age these three brothers are identical,

I am fourteen years old.

Last Saturday we had a party  
in our Hebrew School

Last Saturday we had a game  
in the ~~side~~ street.

Last Saturday we have play  
marbles on broad street.

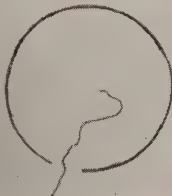


$$2 + 2 = 4$$

$$5 - 2 = 3$$

$$25 - 4 = 5$$

$$\frac{1}{2} + \frac{3}{4} = 12$$



$$\begin{array}{r} 78314 \\ -69372 \\ \hline 27042 \end{array}$$

$$\begin{array}{r} 638 \\ 9 \overline{)6472} \end{array}$$

FIGURE 4.—Samples of Work Done by the Oldest Brother, Amos: Mental Age 7, Chronological Age 13, I.Q. 54.



but not by intelligence quotient. Andrew, with an I.Q. of 71, is near the borderline and at least a high-grade moron: Elmer, being twelve years old, has an I.Q. of 64 and is much more subnormal; Amos, being over thirteen years old, has an I.Q. of 54, and is a low-grade moron. Elmer and Amos can never do satisfactory fourth-grade work if they remain in school all their lives. Much drilling has given them a little facility in adding and multiplying and in reading. In some processes they are even superior to their brighter brother, Andrew; but that is due simply to mechanical drill and repetition, not to real superiority. Much of their present school ability is absolutely useless, and it probably has had no strengthening effect on their minds. Their information is woefully meager. They do not know where leather comes from or why we celebrate the fourth of July. Asked who Abraham Lincoln was, they both paused a long time in apparent reflection. Finally Elmer said: "He was a man." Amos said he knew that, and added: "He was a poor boy who got rich."

The children had gone to school for years. Do not their replies show the futility of teaching them academic abstractions? What they, and the legion they represent, need is training along concrete, practical, and vocational lines.

*Simon, I.Q. 54*

On looking at the drawings and the written school work (Figure 5) of Simon, age eleven, one can hardly believe that this boy is really only a little more than a high-grade imbecile. His mental age is six, and on the intelligence scale his rank is that of a low-grade moron. He is an instructive case for the teacher who is inclined to place too much importance upon mechanical drill and written work. Here we have a boy who cannot tie his shoe strings, but who can write out a long list of history facts with scarcely a mistake. Here is a boy who cannot discriminate between left and right, who cannot tell time, who would sooner have a nickel than a dime, who thinks that leather grows on trees,—yet he can write without any copy historical statements about Columbus, Magellan, the Pilgrims, and Amerigo Vespucci. How can we explain this amazing situation.

One word holds the key to the explanation, and that word is memory. Memory, as Binet reminded us, is the great simulator of intelligence; but it is never a complete equivalent or even a trustworthy symptom of intelligence. Practice so thoroughly familiarized Simon with the written history facts that after a while the teacher could take the chart away and still the boy was able to write out the sentences. Put a hungry white rat into a complicated maze and after re-

peated trials it will learn the correct path and easily find its way out. The creature memorizes the maze; but it is a mechanical, motor kind of memory. In a similar way Simon acquired the motor associations which result in his surprising ability to set down historical facts.

That there was no true perception of these facts was prettily demonstrated by a conversation I had with him, somewhat as follows: "Who was Christopher Columbus?" I asked. There was no reply. The question proved to be too abstract. "What did Christopher do?" Still no answer. Finally, I put it this way: "Who discovered America?" and received the response, "Christopher Columbus." I very much doubt, however, that Simon even knows that Christopher Columbus was a man. It is easy enough to say that he ought to know, but it is better to possess one's patience because all that we are sure that he does know is the motor trick of writing out the 'history facts.'

One of Simon's teachers lost her patience because of his persistent refusal to recite. He was inveterately silent; and because he was sometimes heard to talk on the playground, it began to look to the teacher as though the boy was simply obstinate in his silence at lessons. She summoned his father to school, one day, and Simon was rather severely disciplined for his refusal to recite. What a comic tragedy it must

<p>See the little boy A</p> <p>dog B</p> <p>he.</p> <p>C</p> <p>D</p>	<table border="1"> <tr> <td data-bbox="501 314 684 435"> <math display="block">\begin{array}{r} 872 \\ \times 8 \\ \hline 6976 \end{array}</math> </td> <td data-bbox="684 314 888 435"> <p>ans 6976</p> </td> </tr> <tr> <td colspan="2" data-bbox="501 435 888 496">E</td> </tr> </table>	$\begin{array}{r} 872 \\ \times 8 \\ \hline 6976 \end{array}$	<p>ans 6976</p>	E	
$\begin{array}{r} 872 \\ \times 8 \\ \hline 6976 \end{array}$	<p>ans 6976</p>				
E					
<p><del>grades</del> <del>History facts</del> Feb 26, 1918</p> <p>F</p> <p>1. The Indian's lived in America before the white men.</p> <p>2. Christopher Columbus discovered America in 1492</p> <p>3. The Pilgrims came to Plymouth in 1620</p> <p>4. Until the compass was invented men did not dare to sail out of sight of land</p> <p>5. America was named of Amerigo Vesputti an early explorer</p> <p>6. Magellan's men <u>was</u> first to sail around the world</p>					

FIGURE 5.—Samples of Work Done by Simon: Mental Age 6, Chronological Age 11, I.Q. 54.

A. See the little boy, written from dictation. B. Spelling of dog and horse. C. Copy of a square. D. Copy of a diamond. E. Example in multiplication. F. "History Facts," written without copy or help.

have been when poor Simon was scolded, upbraided, and finally beaten, because he would not recite! Like reproving a blind man because he will not see! Although there is some timidity in this boy, he is very good hearted, and his silence was chiefly due to a consistent lack of ideas and of comprehension.

This story contains a good deal of psychology, both applied and mis-applied. It warns us to be conservative in labelling any pupil stubborn, lazy, wilful. Many a deficient child has been unjustly described by such adjectives. Sometimes, to be sure, the feebleminded are temporarily obstinate, but even then, it is often an instinctive resistance against an educational treatment for which they are not fitted. In such cases their obstinacy is a self-protective reaction against the wrong thing and a reminder of the fact that we ought to modify our program and our pedagogical tactics. In general we may say, the special child needs a special program.

*Postscript.* This story about Simon has an interesting and instructive sequel. He was first examined by the writer in the spring of 1918. During the course of a year he made such progress in his school work that he was recommended for promotion, and a question was raised whether there had not been an error in the original diagnosis. The writer made a careful reexamination in the spring of 1919 and made the following report:

“Simon has developed physically since the previous year, speaks with more facility, reads more fluently, spells better, and shows other minor improvements chiefly in the sphere of memory and habit; but there has been

relatively no gain in intelligence. His intelligence quotient has remained absolutely the same (54). His mental age is six and one-half years by the Stanford revision of the Binet scale.

Tests which require comprehension, analysis, abstraction, comparison are uniformly beyond him at the mental age levels of 6, 7, 8, and 9. He cannot describe a simple picture, he cannot state differences and similarities between common objects, he cannot solve simple concrete problems in arithmetic. He has learned in the past year to tell time, but he cannot give the names of the months of the year. His sister ties his shoe strings, though a seven-year-old boy usually can tie a double bow knot. He can not yet draw a satisfactory diamond.

Simon has shown such improvement in his school work that he will be advanced to Grade III, but he does not earn this promotion on the basis of actual intelligence. He can do simple problems in long division, but he does not know what he is doing while he does them. He can multiply on paper one-tenth by 400, but he does not know how much two halves are, and he thought that one-tenth was bigger than one-half. He writes with remarkable fidelity the dictation exercises and history facts, but he does not know who Christopher Columbus or Benjamin Franklin or George Washington were. He does not know in what State he lives or where leather comes from, or who the President of the United States is. He reads and he writes, but he cannot reproduce the thought of what he reads or of what he writes. Additional details might be given to prove that he does not have that ordinary information and comprehension which go with even the average intelligence of a third-grade child, age 9.

Simon will continue to make a certain amount of improvement in his school work. I think he could be taught to extract square root with paper and pencil, but for this very reason he remains an instructive example of the fact that habituation and intelligence are neither identical nor equivalent and that, even with a rather low I.Q., a pupil may sometimes show a surprising, but deceptive skill on the mechanical side of school work.





### III.

## HOW TO MAKE A SPECIAL PROGRAM FOR THE DEFICIENT PUPIL



### III. HOW TO MAKE A SPECIAL PROGRAM FOR THE DEFICIENT PUPIL

We have now come to the most practical part of the teacher's task. It is important to know something about the causes, the characteristics, and the consequences of mental deficiency; it is important to be intelligently interested in the deficient child; but the most important thing of all is to do something for him and to do it systematically. *There is no excuse for neglecting a mentally deficient child, whether he is in a crowded classroom of a large city, or in some village or country school.* We may wish that we could send him to a special class where he would have expert attention. But how often is this altogether impossible. Fortunately, however, one thing remains which we can do. We can **(devise a special program for the deficient child.)** Every deficient child in our public schools is entitled to such a program. It is the duty of the teacher to establish such a special program.

The Individual Program method of training the mentally deficient pupil is always practical when he cannot be assigned to a special class. It will not take an undue amount of the teacher's time or energy, particularly if she enlists the aid of her brighter pupils or of some monitor in the

upper grades and makes the situation a kind of family problem in which others are encouraged to help.

Normal children will see much of exceptional and subnormal humanity when they are grown up. Let them learn what they can as they grow. The presence of a deficient pupil in the school room and on the playground, therefore, offers an opportunity for social education in a very real sense. Let the teacher take a hopeful, constructive attitude and attempt to make an educational asset of the deficient pupil. It will help to solve the whole problem.

Under favorable conditions a special program in the regular schoolroom may be almost as beneficial to the deficient child as a special class itself would be. Such a program is readily started. It means at first only a few adaptations. Naturally, the deficient pupil will be permitted to share in the regular school work whenever he is at all fitted to do so, but during certain periods of the day special activities should be arranged for him. The teacher may start with only one special period, but gradually she should develop a special schedule of activities which will keep him busy and contented during most of the school day. Concrete suggestions for making out such a schedule will now be given. These suggestions must, of course, be adapted to each individual

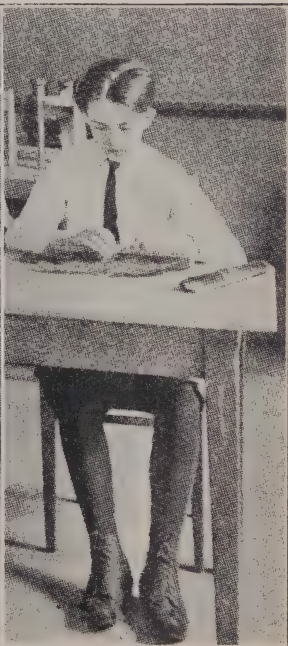


FIG. 6.—Individual Hand-work for a Deficient Girl.  
(This girl is weaving a mat.)

FIG. 7.—A Special Hand-work Period for a Deficient Boy.  
(This boy is seated at a table in a corner of a regular classroom, making a useful brush.)

case; and the enterprising teacher will supplement them with many ideas altogether her own.

### *The Three R's*

We will begin with the 3 R's; but not because they are the most important. They are not. It might even be said that a feebleminded child is one who cannot be taught the 3 R's with any marked advantage to himself or to society. It has been suggested that the 3 R's constitute the fads and frills in the education of the mentally deficient. This is not altogether true. Some high-grade children learn to write a simple letter, and sometimes they put this ability to good use. Some learn to read the newspapers sufficiently to look up "Help Wanted" ads when they are out of a job, and they have occasion to make use of some of their arithmetic in handling their simple financial affairs. But after making a few allowances like this, there is little to be said for the practical importance of the 'fundamentals,' for the simple reason that they are not fundamental in the training of the mentally deficient. They are secondary 'cultural' subjects.

However, they are convenient subjects to teach; they furnish occupation and often no little enjoyment to the children. If a child will learn to take pleasure even in the simplest reading, that is enough to justify the teaching. Fur-

thermore, even a slight ability in reading and writing serves to make the child seem more like other children, and when he is a high-grade deficient, he should be given an opportunity to show how much he can master. For all these reasons the 3 R's may find a place on the special program of the deficient child, but the teacher should not go to undue lengths in teaching these academic subjects.

When a child can do no more than scribble, when he cannot even make a good kindergarten drawing of a house, do not go to extremes to teach him penmanship. And if a child is so deficient that he ordinarily talks only in phrases and short sentences, and if, after months in the schoolroom, he is unable to recognize a few primer words, do not worry about your failure to teach him to read. He probably needs other kinds of instruction much more. I have known conscientious teachers to blame themselves unjustly for failures which were due to the sheer incapacity of the pupil.

In arithmetic, when it can be taught at all, there is a happy mean. Abstract number relations are beyond the feebleminded, and many of the processes which you *can* teach by dint of drill will be pure acquisitions of memory and will never be applied. But there are concrete relations which are worth teaching by means of yard stick, foot rule, quart and pint measure,



cloth, paper, sand, water, coins, etc. Ideas of near and far, short and long, longer, shorter, one half, one quarter, inch, foot, ten cents, twenty-five cents, pound, diameter, circumference, etc., can be taught by the well-known methods of concrete arithmetic. It is well to keep most of the work on this concrete level. Be content with a few fundamentals of everyday importance, like the values of coins, making change, estimating and measuring dimensions, the length of a foot, one half, one third, one fourth, the use of a ruler, telling time, writing numbers, and simple problems.

### *Drawing*

This is an excellent form of busy work for a deficient child. Give him abundant paper eight by ten inches or larger in size; give him a supply of colored crayons and let him draw as he wishes, a half hour if he is interested. Wrapping paper may be economically used. Magazine advertisements offer abundant material to color. This kind of work at least helps to keep the child occupied and interested. It has educational values beside. Any form of drawing or water-color work, tracing, copying, etc., may be used. Some children like to use a ruler and a compass, and stiff pieces of cardboard cut into various shapes; with these they construct geometric designs which they fill in with color. Drawing has

this advantage, that all grades of children can engage in it to some extent.

### *Busy Work*

For a lower grade child who has difficulty in doing any ordinary school work whatever, the teacher must provide various forms of 'busy work.' It is better that such a child put pegs in a peg board and pull them out and put them in again and again, than that he should sit idle or disturb other children. Have him paste, cut, sort, prick, match, fold—anything to keep him occupied. Busy work is often educative, it is always better than neglect or a futile effort to make the child join in regular class work. The teacher will have to make the plans and take the initiative in starting this work, but once it is started, a monitor pupil, chosen from the brighter, older children, can easily keep it going and can add to it. Make it a point to get these bright children to make suggestions and to assist in every way possible. Following are concrete examples of available kinds of busy work.\*

1. Stringing beads. Beads may be supplied or made. [Straws, circles, acorns, rose pips, peas].

2. Making paper chains of various sizes, colors, and arrangements.

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\*For further suggestions see the book list, page 89. I am indebted to Miss Norma Cutts, Supervisor of Special Classes, New Haven, for assistance in the preparation of these references.

3. Sorting colors (worsted, paper, cloth, etc).
4. Sorting sizes (cards, sticks).
5. Outlining simple drawings and designs with lentils, squash or melon seeds. The drawings are placed flat on the desk, and the child overlays the outlines.
6. Sorting lengths (strings, etc., of various lengths).
7. Weaving with oilcloth or linen mats and colored splints, and with paper mats.
8. Sewing cards of simple design.
9. Covering picture frames (of cardboard) with worsted or raffia (buttonhole stitch).
10. Paper cutting—have the child cut out designs from wall paper, advertisements from magazines, and human figures from fashion books.
11. Tracing and coloring from large patterns.
12. Pasting colored forms in border designs.
13. Sewing large buttons on bright material, with colored thread.
14. Spool knitting.
15. Modelling with clay, sand, plasticene.
16. Making scrapbooks. Pasting pictures into large and small scrapbooks is an excellent form of pastime work.
17. All forms of paper work. Free cutting, cutting to outline, paper mat weaving, paper flowers, paper dolls, transparencies, silhouettes,

holiday tokens, paper tearing, paper folding, etc. (see References in book list).

### *Handicraft and Vocational Work*

Here is the teacher's greatest opportunity. It may seem rather hopeless to undertake vocational work for the particular benefit of one or two children, in a room with screwed down seats, and in a day largely devoted to the task of teaching the academic subjects. But the situation is not as hopeless as it looks. There is a way when there is a will. In the first place, there are many forms of vocational activity which can be carried out as seat work in an ordinary desk. In the second place, it would really be an excellent thing if an enterprising teacher put a work table in the corner of the room or had her larger boys make a small work bench with a vise or a loom for schoolroom use. The fact that the normal children would sometimes use this table or bench for their own interests would certainly not be an objection. Nothing will make the deficient child so happy as vocational work; nothing will better train and discipline him. While it will take a little resourcefulness, planning, and courage on the part of the teacher to get vocational work started, the effort will be repaid because the defective child will be less of a burden. And again, when once the work is started, the older children can help a great deal to keep it going. In fact,

in some schools a committee of older children could be enlisted and take most of the responsibility. In these days we do not have to justify such a suggestion because it is recognized that such social cooperation and helpfulness in the schoolroom are the best kind of education for all concerned. The control of the great social problem of feeble-mindedness is a question of applied sociology. And it is chiefly a vocational problem. Why not take the first steps toward this control in the schoolroom and let future citizens assist where they can?

We make below a rather extended list of suggestions concerning forms and methods of vocational work; because this work offers the largest possibilities. Some suggestions are very readily put into practice; others will require a little scheming and a slight expense; but all of them are workable even under rural school conditions. The teacher who becomes interested in a particular line of work, like basketry or weaving, will get assistance from the handbooks mentioned at the end of this manual. Instead of trying to cover too many occupational activities, the teacher will do well to single out a few, best adapted to her children and to the circumstances.

### 1. Knitting

This is a silent, simple and very useful form of handwork to adopt. Children with only a six

or seven-year-old intelligence can knit, and recent experiences with Red Cross work have shown that knitting can easily be introduced into the schoolroom. The following articles can be made: muffler, wristlet, caps, socks, mittens, doll's garments, afghan, wash glove, face cloth, cover for baby's ball, etc. Simple arrangements can often be made for the sale of articles, to repay at least the cost of materials.

## 2. Spool Knitting

This form of toy knitting is adapted even to children of low-grade deficiency, and is excellent in many cases. Reins for playing horse (colored or uncolored) are favorite articles of manufacture by this method. Mats, hot plate mats, and necklaces of Dexter cotton No. 6 can be made by the same method.

## 3. Crocheting

This is more difficult than knitting, but may be adapted to middle-grade and high-grade children. Jute, Germantown, raffia twine, carpet warp and crochet cotton may be used. The coarser material, like carpet warp or strips of cotton an inch or two in width, is usually preferable. Large wooden hooks may then be used, and rugs, knitting bags, and book bags may then be made.

#### 4. Sewing

This also is a most satisfactory form of handwork. An excellent outline, explaining different kinds of stitches, and giving directions for making various articles is to be found in the 1917 edition of *Plans for Progress* (pp. 115-137) published by the Connecticut State Board of Education. Patterns, specifications, etc., are given for towels, bags, aprons, waists, underwear, bathrobe, blouses, pillowcases, and dress skirts. Simple forms of sewing and easy problems may be adapted to low-grade children. Cross stitching and darning designs are valuable.

#### 5. Rag Carpet Rugs

This is an occupation, at once so simple, interesting and useful, that we give directions in full. Any rural teacher can take advantage of the opportunity offered in making these old-fashioned rugs.

Let the children bring washed cast off clothing, like under garments, stockings, dresses, coats, and skirts. Let this material be cut or torn into strips by the deficient child, and have the strips of similar color sewn together, end to end; roll the strips into balls.

Take three of these balls and tie their three ends together, and have the child braid these strips tightly together. This braided material can then be sewed together and made into any



shape of rug desired. If a round rug is desired, start with the end of a braid in the center and keep winding into a circle or spiral. The braids should be sewed so that both sides of the rug may be used. If a square rug is desired, start in the center and shape in square fashion. If an oval rug is desired, start at one side of the center and lay the first coils of braid in parallel straight lines, gradually working to the oval shape.

### 6. Weaving

Here is a field for work of many varieties. Small handlooms may be obtained or may be improvised. A large frame for shawl making could be made by a bright boy under direction. Large and small mats, rugs, and holders may be woven. Warp thread, jute, and cotton or woolen strips may be used as materials. "Old knit underclothing is easily dyed and makes excellent rugs." Hooked rugs may be made on a burlap foundation and double braided rugs on wooden looms. Rag carpet may also be woven.

### 7. Cord Work

This is adapted to different grades of children and may be attempted on either a small or large scale. Bracelets, doll's curtains, shopping bags, watch fobs, hammocks may be mentioned.

### 8. Basketry

If the teacher has had experience in this handicraft or will teach it to herself through one of the many practical handbooks, she will find it an interesting occupation to introduce. Baskets may be made of reed, or of reed or rope foundation with raffia. Rope or twine has many advantages for children. Braided native materials may also be used, like corn husks, willow, cat-tails.

### 9. Raffia Work

Raffia is a strong, pliable grass, which may be obtained either in natural or dyed colors. It lends itself to many uses besides basketry, for it may be wound, woven, knitted or braided into various articles, like belts, picture frames, napkin rings, sewing bags, etc.

### 10. Woodwork

The opportunities here are so many that it is hardly necessary to detail them. If the teacher is ready to secure a few necessary tools, and with the coöperation of some of the older boys (or girls) they put up a simple bench in the shed, basement, or even in the corner of her school-room, many kinds of woodwork will suggest themselves. It is not necessary for the teacher to be a carpenter or a cabinet maker; nor is it necessary to have a large fund of materials. Old

boxes and odds and ends of lumber can be utilized. Stools, stands, shelves, pencil racks, bird houses—many simple things for the school or the home can be made. The assistance of 'monitor pupils' will be particularly helpful and relieve the teacher.

### 11. Coping Saw Work

This form of woodwork is peculiarly fitted to schoolroom conditions and can be easily adapted to the needs of even rather low-grade children. The equipment and materials are inexpensive; a regular work bench may be dispensed with; and the work is clean. An unlimited variety of articles can be made, presenting many degrees of difficulty to the child. Picture puzzles (jig saw puzzles), are a favorite product. Dissected maps can be made and used by the classes in geography. Indeed, much of the handwork suggested can be correlated with the regular school work of the normal children. The benefits are not limited to the deficient child.

### 12. Special Occupations

There is a group of occupations which, while not altogether impractical in the ordinary schoolroom, require a little extra equipment and training on the part of the teacher. Their value in a special classroom has already been demonstrated, and under certain circumstances the

regular teacher may find it well to consider one or more of them. Handbooks giving detailed directions may be secured. Such occupations are brush-making, chair caning, leather work, metal work, cobbling, toy making.

### 13. Home and School Chores

Whenever possible, the deficient child should be taught to do errands and small tasks. This is good training for him, makes him more useful and promotes his self-respect. At school he may be allowed to sweep and scrub the floors, dust, clean the woodwork, clean the windows, fill the woodbox, black the stove, collect the papers, sharpen the pencils, rake the yard. This furnishes such excellent vocational training that he may well be given the opportunity to clean the windows, etc., even oftener than is absolutely necessary.

Home chores are equally important, and parents should be encouraged to assign regular definite tasks in the kitchen, bedroom, farm, and shop. As already suggested, teachers should point out to parents the value of such work. The deficient child should perform a certain number of these chores, even if it is more convenient that they be attended to by some one else. As the child grows older and no longer can get any benefit out of the academic work of the school, the advisability of his spending at least a half

of each day in helping at home may well be considered. It should always be remembered that the right kind of work trains him in just those habits which he most needs, and that reading and arithmetic have no power to strengthen his mind.

### *Physical Education*

This is important, because motor or muscle training is fundamental to other forms of training. Good posture, good step, rhythm, quickness in muscular response, will improve the general demeanor of the deficient child and help to make him more alert. Therefore, any kind of setting-up exercises, marching, calisthenics, and special physical exercises demanding motor balance and control will have a value. Dancing and music are often peculiarly effective. Games are beneficial both for mental and physical reasons. So far as practical, the deficient child should be permitted to join in the games and physical exercise of the normal children. If some of these children are made to take a responsible interest, they will arrange and adapt games for the benefit of the deficient child.

### *Personal Habits*

Simple matters which often take care of themselves in normal children must be given special attention in the deficient child. His

everyday personal habits are too important to be neglected. While some of these things depend on the home, the teacher can do a great deal to bring them up to standard. General deportment, obedience, saying 'good morning,' 'thank you,' 'if you please,' etc., washing himself, tying his necktie and shoestrings, keeping himself neat, shaking hands, showing signs of respect—all these manners and courtesies of everyday life are important, because, taken altogether, they will do more than anything else to make the child like other children. They are the true fundamentals in the education of the deficient child. Do not be too zealous to teach him reading when he does not know how to use a handkerchief.

### THE INDIVIDUAL PROGRAM METHOD

The most practical way in which the teacher can render service to the exceptional pupil, is to institute a special program for him. This is much better than drifting along from day to day. It will take only a little initiative on the teacher's part to start such an individual program and to set it going on a modest scale.

As a final encouragement to the exercise of this initiative, we add a sample special schedule, showing how the individual program method could be applied to John Smith. John Smith is a typical deficient pupil, age 12, attending a

district school in the county of....., state of..... He can read a primer, writes and spells a little; but is idle and distracting and bothersome most of the day—unless he is occupied, let us say, as follows:

*A SPECIAL PROGRAM FOR JOHN SMITH, AGE 12, MENTAL AGE 7; INTELLIGENCE QUOTIENT 60.*

This program is suggestive of the kind of schedule which may be worked out for any deficient pupil.

- 9:00 to 9:15 *Opening Exercises*
- 9:15 to 9:45 *Reading.* May read with class or with Monitor A (Fred Jones) who reads with him in the cloakroom or vestibule.
- 9:45 to 10:15 *Paper Work.* Monitor A (Fred Jones) sees to this; arranges for the material and gives help when necessary. This includes drawing, coloring pictures, making and filling in designs, paper cutting, cutting out pictures, etc.
- 10:15 to 10:30 *Recess.* Monitor B. (Sam Robinson) is responsible for this period. He sees that John gets a chance to join some of the games; he may sometimes arrange special games for him; and he also sees to it that no one torments or imposes upon John on the playground or going to and from school. (It is important for the teacher not to neglect this.)
- 10:30 to 10:45 *Outdoor Chores or Errands.* Cleaning up yard, raking, spading flower beds or shrubs, sweeping, washing windows, errands, etc. (If there are not abundant opportunities, the teacher should make them.)



- 10:45 to 11:00 *Writing.* Copying words and figures, and writing exercises. Monitor C. (Jane Brown)
- 11:45 to Dismissal *Handwork.* Knitting, spool knitting, Dexter knitting (Bartholomew mat frame), braiding, etc.
- 1:30 to 1:45 *Reading.* (with regular group)
- 1:45 to 2:00 *Writing.* Monitor C.
- 2:00 to 2:30 *Seat Work.* Pasting: scrap book of magazine pictures. Cutting out and pasting of geographical pictures for Geographical Scrap Book used by the regular classes in geography. (History, Nature Study, and other scrap books may be added to the series.) Monitor A and teacher supervise and direct.
- 2:30 to 2:45 *Recess* (Monitor B)
- 2:45 to 3:30 *Industrial Work.* Weaving rag rug; brushmaking; making basket; woodwork at a bench in the basement or corner of the room (Monitor C or D). (The teacher may arrange with parents for early dismissal, so John can do definite chores at home. In many instances, it is desirable to have the deficient child attend school for only part of the day. Parents may readily cooperate on that basis.)

### *A Final Word to the Teacher*

While we appreciate that many of the foregoing suggestions have no application to her particular problem, we hope that they are numerous enough so that she can undertake to work out a special program for her deficient pupil. She can start by giving him at least one period of special seatwork, and then she can gradually add activi-

ties to this (often with the aid of her bright pupils) until she will have established a new schedule for him.

We wish to repeat that, wherever possible, the teacher should make the deficient child 'a family problem,' in the solution of which, the older and brighter pupils may share. Let her parcel out some of the minor responsibilities to these pupils, and soon she will find that the special program maintains itself and grows in possibilities. A little initiative on the part of the teacher, combined with ingenuity and interest will go a long way toward improving the status of the deficient school child.

The teacher in a rural district or small town may well regard herself as *ex officio* a kind of social worker for her community. Her interest need not be rigidly limited to pupils of school age, and much that we have said in the preceding pages applies to children of either school or pre-school age with handicaps other than mental subnormality. There may be some blind child, deaf child, crippled or physically defective child who is in danger of suffering from educational neglect. The deaf child, in particular, needs special training as early as the age of two or three years. Tactfully the teacher can always take an active interest in these cases and can turn to public and state agencies for assistance in aiding parents to meet the problems.



IV.

WHERE TEACHER AND PARENT CAN  
GET FURTHER HELP



## IV. WHERE TEACHER AND PARENT CAN GET FURTHER HELP

### 1. Books

The books which deal with the study and treatment of mental deficiency are very numerous. We shall make special mention, however, of those which are of most practical value in organizing a special program for the exceptional school child. If the teacher cannot add any of these books to her own personal library, we suggest that she make a few selections and have them purchased by the school superintendent or school committee. Sometimes she can borrow the book from a local or state library.

An inexpensive book of general value is that by Meta Anderson, *Education of Defectives in the Public Schools*, World Book Company, Yonkers, New York, 1917. This little book gives a good general presentation of special class work, but contains many suggestions which would be helpful in planning a special individual program.

The most practical, concrete and comprehensive book dealing with methods of instructing mentally deficient children is the one which was compiled coöperatively by the Special Class Teachers of Boston. It can be highly recom-

mended. It is called *The Boston Way*, and is published by the Rumford Press, Concord, N. H., 1921. In this book the Boston Special Class Teachers have gathered together the school activities which they found most practical in their special classes. This volume, therefore, contains a detailed account of different types of work. It also contains references to other books.

We should also recommend *The Industrial Art Textbooks*, by Bonnie Shaw and Hugo Froelich (A. S. Barnes Co., New York). There is one booklet prepared for each grade from one to eight. The first four in this series will be found especially helpful. Directions and illustrations are given for pupils in woodwork, stick printing, posters, paper cutting, needlework, interior decoration, basketry, etc. The projects suggested are inexpensive, and the book contains many helpful ideas.

*Prevocational and Industrial Arts*, by Harry E. Wood and James H. Smith (Atkinson, Mentzer, and Co., Chicago, 1919) covers a somewhat different field. This book gives detailed instructions for many kinds of hand work, such as woodwork, concrete mixing, shoe repairing, chair caning, etc. It may prove especially helpful for the high-grade deficient child who has vocational interests and capacity.

*The Handicraft Book*, by Jessup and Logue (A. S. Barnes Co., 1913), is a small book giving



detailed directions for knotting, looping, weaving, and basketry. It is arranged for children of primary-grade capacity.

*Seat Work and Industrial Occupations*, by Mary L. Gilman and Elizabeth Williams (The Macmillan Co., New York, 1916), contains helpful suggestions for simple work of a kindergarten nature and many ideas for paper work.

Teachers nowadays can get many other practical hints for seat work and handicraft from current educational journals, newspapers, magazines, and even farm journals. It is advisable to keep a book of clippings for this purpose. In a year or two one can gather many concrete suggestions which may be very useful in carrying along an individual special program.

The teacher who wishes assistance in correcting speech defects may consult Scripture and Jackson's *Manual of Exercises for the Correction of Speech Disorders*, (F. A. Davis Company, Philadelphia).

If the teacher can secure only one of these books, the volume entitled *The Boston Way* will probably be found to be the most serviceable. We would insist, however, that no book is entirely indispensable and that with the suggestions given in the present manual the teacher may on her own resources undertake the organization of a special program for the deficient pupil.

As a supplementary list of books which are helpful on special subjects we would mention the following:

Bancroft, Jessie T. *Games for Playground, Home, School, and Gymnasium* (Macmillan Co., N. Y.).

Ward, Crampton. *The Folk Dance Book* (A. S. Barnes Co., N. Y., 1909).

White, Mary. *How to Make Baskets* (Doubleday, Page and Co., Garden City, N. Y., 1901).

Thatcher, Edward. *Making Tin Can Toys* (J. B. Lippincott Co., Philadelphia, 1919).

Peterson, Louis C. *Educational Toys* (The Manual Arts Press, Peoria, Ill., 1920).

This book gives directions for making toys with the coping-saw (many of them animal toys) with several full-page patterns that may be traced or enlarged.

Moore, Harris W. *Manual Training Toys for the Boy's Workshop* (The Manual Arts Press, Peoria, Ill., 1916).

This book gives directions for making toys more difficult than those in the preceding book.

Martin, William S. *Manual Training Play Problems* (Macmillan Co., N. Y., 1917).

This book has sketches and directions for still more difficult toys, such as stilts, a roller-coaster, a sail boat, etc.

Solar, Frank J. *Handicraft Projects*. (Bruce Publishing Co., Milwaukee, Wis., 1921).

This is a small book containing directions and patterns for many lessons in woodwork.

A few books dealings more broadly with the general aspects of mental deficiency and handicaps should be mentioned.

*Social Aspects of Mental Hygiene* (Yale University Press, New Haven, Conn., 1925).

This is a small but convenient volume of addresses by Williams, Campbell, Myerson, Gesell, Fernald and Taft. Dr. Fernald discusses the Feebleminded in the Community.

Terman, L. M. *The Measurement of Intelligence* (Houghton Mifflin Company, 1916).

This is a standard book containing the Stanford revision of the Binet measuring scale of intelligence.

Wallin, J. E. W. *The Education of Handicapped Children* (Houghton Mifflin Company, 1924).

This book deals with public school questions relating to the education of handicapped children, with special reference to the mentally deficient.

Gesell, A. L. *Exceptional Children and the Public School Policy* (Yale University Press, New Haven, Conn.).

This book contains a report of a mental survey of the elementary schools of New Haven, Conn., with concrete suggestions regarding the organization of special classes.

Gesell, A. L. *The Pre-School Child: From the Standpoint of Public Hygiene and Education* (Houghton Mifflin Company, Boston).

This book contains chapters on handicapped children of school age and of pre-school age. It deals particularly with the pre-school age and with the work of nursery schools and kindergartens.

Gesell, A. L. *The Mental Growth of the Pre-school Child: a Psychological Outline of Normal Development from Birth to the Sixth Year. Including a System of Developmental Diagnosis.* (Macmillan Company, 1925).

This book deals with the period of infancy and the early diagnosis of mental deficiency. It is based on a study of norms of development in 500 normal children.

## 2. *Public Agencies and Institutions*

The teacher should, of course, make use of the services of public and charitable agencies whenever available—school physician, school nurse, public health nurse, state board of charities, state board of education, county superintendent of schools, etc. If the case of deficiency is extremely serious and commitment to a state institution is desirable, she may get directions as to procedure from local authorities or address a letter to the state board of charities.

Societies and committees for mental hygiene have been established in many parts of the country; and these are also in a position to be of service. Following is a directory of these organi-

zations, with the address of the secretary, who will always be able to supply information in regard to the disposition of serious cases of mental defect and disorder.

## DIRECTORY OF COMMITTEES AND SOCIETIES FOR MENTAL HYGIENE

### NATIONAL ORGANIZATIONS

- The National Committee for Mental Hygiene, Inc.  
370 Seventh Avenue, New York City  
Dr. Frankwood E. Williams, Medical Director  
Dr. Ralph P. Truitt, Director, Division on Prevention of Delinquency  
Dr. Thomas H. Haines, Director, Division on Mental Deficiency  
Dr. George K. Pratt, Assistant to Medical Director  
Clifford W. Beers, Secretary  
Paul O. Komora, Assistant Secretary  
Edith M. Furbush, Statistician
- The Canadian National Committee for Mental Hygiene  
102 College Street, Toronto, Canada  
Dr. C. K. Clarke, Medical Director  
Dr. C. M. Hincks, Associate Medical Director and Secretary  
Dr. Gordon S. Mundie, Associate Medical Director

### STATE ORGANIZATIONS

- Alabama Society for Mental Hygiene  
Dr. W. D. Partlow, Secretary, Tuscaloosa, Alabama
- California Society for Mental Hygiene  
Miss Julia George, Secretary  
1136 Eddy Street, San Francisco, Cal.
- Connecticut Society for Mental Hygiene  
39 Church Street, New Haven, Conn.  
Otto T. Wiedman, Medical Director  
Mrs. Helen M. Ireland, Secretary

- District of Columbia Society for Mental Hygiene  
Dr. D. Percy Hickling, Secretary  
1305 Rhode Island Avenue, Washington, D. C.
- Georgia Society for Mental Hygiene  
In process of organization  
Dr. N. M. Owensby, Secretary.  
Peters Building, Atlanta, Ga.
- Illinois Society for Mental Hygiene  
5 North Wabash Avenue, Chicago, Ill.  
Dr. Ralph P. Truitt, Medical Director
- Indiana Society for Mental Hygiene  
Paul L. Kirby, Secretary  
88 Baldwin Block, Indianapolis, Ind.
- Iowa Society for Mental Hygiene  
(Not yet active.)
- Kansas Society for Mental Hygiene  
Dr. Florence B. Sherbon, Secretary  
Mulvane Building, Topeka, Kansas
- Louisiana Society for Mental Hygiene  
Dr. Maud Loeber, Secretary  
1424 Milan Street, New Orleans, La.
- Mental Hygiene Society of Maryland  
130 So. Calvert Street, Baltimore, Md.  
Dr. Chas. B. Thompson, Exec. Secretary
- Massachusetts Society for Mental Hygiene  
1132 Kimball Building, 18 Tremont Street, Boston,  
Mass.  
Dr. George K. Pratt, Medical Director
- Maine Society for Mental Hygiene  
In process of organization. Address Dr. F. C.  
Tyson, Augusta, Maine
- Mississippi Society for Mental Hygiene  
Dr. J. H. Fox, Secretary, Jackson, Mississippi
- Missouri Society for Mental Hygiene  
Dr. James F. McFadden, Secretary, Humboldt Build-  
ing, St. Louis, Mo.
- Committee on Mental Hygiene of the New York State  
Charities Aid Association  
105 East 22d Street, New York City  
Stanley P. Davies, Exec. Secretary

- North Carolina Society for Mental Hygiene  
Dr. Albert Anderson, Secretary, Raleigh, N. C.
- Oregon Society for Mental Hygiene  
Professor Samuel C. Kohs, Secretary, Portland, Ore.
- Committee on Mental Hygiene of the Public Charities  
Association of Pennsylvania  
419 South 15th Street, Philadelphia, Pa.  
Kenneth L. M. Pray, Secretary
- Rhode Island Society for Mental Hygiene  
Miss Mary C. Greene, Secretary  
9 Exchange Terrace, Providence, R. I.
- Tennessee Society for Mental Hygiene  
C. C. Menzler, Secretary, Nashville, Tenn.
- Virginia Society for Mental Hygiene  
Dr. William F. Drewry, Petersburg, Virginia

### *3. Volunteer Social Service and After-Care*

It would be extremely convenient if we could always call upon public officials, expert supervisors, teachers of special classes, professional social workers, and similar experts in the solution of the problem of the deficient child. The actual fact, however, is that over half of the population of our country live in rural and village communities, where social agencies may be scantily represented. The rural and the village teacher must herself assume the capacity of social worker when confronted with the problem of feeble-mindedness or delinquency in her school room. She can often perform a genuine social service to the parents of a deficient child, particularly when they do not appreciate their problem. When the child has been definitely diagnosed as mentally deficient, or when the evi-



dence points decisively to mental deficiency, the teacher can be of real assistance to the parents by making suggestions concerning the treatment of the deficient child at home. Parents should realize that this home training is often very important. So far as possible, the child should learn in his home the fundamental personal habits that have to do with his cleanliness, neatness, and everyday deportment. Does he know how to wash himself? Does he comb his own hair? Can he tie his shoestrings? Does he know how and when to use his handkerchief? Some of the simplest things are often neglected. Families fall into the habit of helping the deficient child too much. By patient drill he must be taught those personal habits which will make him less burdensome and more attractive to others. Above all, the child should be taught how to work with his hands. He should learn to assist in the labor of the home, the farm, the shop. So far as practical, he should have definite chores. A deficient child can often be trained into a considerable degree of usefulness. The one thing that can not be taught him is good judgment, and it is for this reason the parents must never expect too much of him.

Tact is always necessary in discussing such questions, but when the teacher is sure of her ground, a positive use of tact is surely much better than a policy of silence or neglect. As a

matter of justice to the child, everything should be done to protect his future.

How should parents be advised in regard to that future? So much depends upon each individual case, that we will give only a few general suggestions.

1. If the child is an excessive burden and a real menace, steps should be taken to have him committed to an institution. We have already given suggestions as to how to proceed in such an event.

2. If the child is apparently 'harmless' and can do a little work, the parents must be made to realize that the child will probably always lack the judgment to take entire care of himself, and that he should always be kept near friends and relatives who will guard him against pitfalls and dangers. A defective young man must not be permitted to try to make his way in the world. A defective young woman should be guarded against every danger. Neither, of course, should marry.

3. The only hope of keeping a feebleminded person safe and happy outside of a colony or institution is to find the right kind of work for that person. Let the occupation be simple and the worker be protected from dangers, and the problem is often solved. It cannot be too often insisted that the goal of our efforts should be the finding of secure and suitable occupation.

It is not proposing too much to say that the teacher, aided by her principal or school superintendent, should concern herself with the deficient boy or girl who has left school and is no longer under her direct authority. The teacher may realize better than any one else in the community how much that feebleminded boy or girl will need guardianship, supervision, and intelligent understanding. The teacher has opportunity, as an agent of the public school system, to assist the parents to understand the situation. If, for any reason, the parents can not meet the situation, she may induce some relative, some kindly disposed man or woman, some member of a church or other local organization, to take a constructive interest in the feebleminded youth. The feebleminded girl, in particular, should be protected and safeguarded in every way possible. The feebleminded boy should be understood by his employer and have many allowances made in his behalf. This kind of social work is possible anywhere—in rural, village, and urban neighborhoods alike. The teacher who engages in it will be rendering a service not only to the feebleminded, but also to the state of which she is a public servant.



















